ERGONOMICS DEMONSTRATION PROJECT

Sawmills

January 2002



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Demonstration Project Closeout Summary

Industry Type

Name: Sawmill SIC: 242

Rule Compliance Date: 7/1/02 for firms with >50 employees, 7/1/03 for rest of firms

in SIC 242

Date Completed: 11/1/01

Date Started: 3/00

Participants:

External: Industry business: Bruce Scharen, Jim Ross, Rex Caffall III,

Industry labor: Jim Neeley, Carl Bullock, Bill Little

Demonstration sites: Aberdeen Lumber, Caffall Brothers Forest Products, Columbia Vista Corporation, Glenn Custom Milling, Mary's

River Lumber

L&I: Ken Mettler, Dana Wilcox, Alex Wright, Bruce Coulter, Stephen Bao,

Jim Rainwood

Original objective(s): The project team reviewed injury patterns in the sawmill industry and determined that the frequency and severity of WMSDs among "lumber handlers"* in sawmills caused significant personal and financial suffering for workers and employers. The project team set a goal of reducing WMSDs for lumber handlers in sawmills by 10% over the next five years. The project team also wanted to demonstrate that sawmills can identify risk factors and WMSD hazards covered by the ergonomics rule and identify ways to reduce or eliminate identified hazards as required by the rule. The information developed by the project is to be shared with the industry through 1) a manual detailing hazards and solutions, 2) ergonomic education materials, and 3) industry specific workshops.

^{*}Lumber Handlers, for the purposes of this initiative, include the following: graders, pullers (green chain and planer chain), sorters/separator operators, machine feeders (trim operators, edger operators, sticker operators, planer operators, bander operators), and machine off-bearers.

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Methods:

A combination of activities went into this project. The project team met monthly and reviewed data to identify specific target issues. Field teams visited demonstration sites to evaluate jobs and work procedures. Managers and workers were interviewed to clarify work processes. Job activities, work layouts, equipment, and anything else useful to the review of jobs were recorded on video or still images. Images were analyzed in the ergonomics laboratory, along with notations and other information to identify risk factors and WMSD hazards. Review of worksites, interviews with mill operators and employees, and interviews with equipment manufacturers helped identify a variety of engineering and administrative control measures. Draft reviews of the manual by L&I staff, project team members, and industry representatives contributed to the accuracy and completeness of the handbook. The education and training materials were also subjected to extensive stakeholdering for accuracy and usability.

Completed objective(s):

- 1. A manual was published that identifies ergonomic risk factors that typically cause WMSDs for lumber handlers in sawmills. The manual explains how risk factors become hazards under the ergonomics rule, and it lists ways to reduce the hazards. The manual also provides sawmill operators a model to use in assessing risk factors for other jobs in sawmills
- 2. Ergonomics education materials included with the manual satisfy the education requirements in the ergonomics rule. The education materials are provided as a PowerPoint presentation on CD-ROM.
- 3. The information developed in this project was used in the creation of an industry specific workshop, "Implementing Ergonomics for Sawmills." The workshop became available in November 2001.

Was the project successful?

Yes, the three products identified as project objectives have been produced. Industry injury patterns will be monitored for a period of years to measure reductions in the frequency and severity of WMSDs in sawmills. The project team demonstrated that sawmill operators can identify WMSD hazards in sawmills, and that effective solutions that also enhance productivity and process efficiency are available.

How can those products be used?

The manual is a guide for sawmill operators to use in identifying WMSD hazards in their mills. The manual provides general descriptions of nine lumber handling jobs in the wood manufacturing process. For these nine jobs, the manual identifies WMSD hazards and a menu of possible solutions. It is a resource/model for use in assessing other jobs in the sawmill to identify hazards and solutions. The training materials will satisfy the education requirements in the ergonomics rule. This Power Point presentation includes slides, instructor notes, and ready-to-print handouts.